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# Contents: Operational Readiness Evaluation (ORE)

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

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- Conduct the BORE for assigned area.
- Request feedback and compile report for review and comment.
- Resolve all comments on signed final report.
- Issue TFMA memo.
- Complete BORE approval document and retain.
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## [Definitions](#)

## **Exhibits**

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[Beneficial Operational Readiness Evaluation \(BORE\) Appointment Memo Template](#)

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# **Training Requirements and Reporting Obligations**

This subject area does not contain training requirements.

This subject area may or may not contain reporting obligations. See the subject area until obligations are listed here.

## **References**

[Accelerator Safety](#) Subject Area

[Facility Use Agreements](#) Home Page (\*Limited Access)

[Facility Use Agreements](#) Subject Area

[Facility Hazard Categorization](#) Subject Area

[Integrated Safety Management System Program Description](#)

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[Work Planning and Control for Experiments and Operations](#) Subject Area

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## Standards of Performance

Facility configurations, operating envelopes, and the design basis shall be documented and controlled.

Each facility shall have a defined business mission and defined operating boundaries to govern work assignments.

## Management System


This subject area belongs to the **Facility Safety** management system.

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Subject Area: **Operational Readiness Evaluation (ORE)**

## Introduction: Operational Readiness Evaluation (ORE)

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

An Operational Readiness Evaluation (ORE) is performed to determine the status of a new or modified facility before start-up is authorized. The purpose of an ORE is to verify that all personnel, hardware, and procedures are ready to permit the activity to be undertaken in a safe and environmentally sound manner. An ORE is not a method for achieving readiness but for verifying it. The ORE ensures that Brookhaven National Laboratory (BNL) managers, supervisors, and staff are aware of their responsibility for health and safety while providing independent review of these responsibilities.


The facility's line management is responsible for ensuring and declaring readiness.

An [Operational Readiness Evaluation \(ORE\) Flowchart](#) is included as an exhibit to provide guidance to line management.

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Subject Area: **Operational Readiness Evaluation (ORE)**

# 1. Determining the Need for an Operational Readiness Evaluation (ORE)

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

## Applicability

This information applies to all managers and staff planning to start-up new or modified facilities where an Operational Readiness Evaluation (ORE) may be required.

## Required Procedure

The Project Leader determines the need for an Operational Readiness Evaluation (ORE) in new or existing facilities. This procedure does not apply to experiments covered by similar review under [Work Planning and Control for Experiments and Operations](#) Subject Area.

<b>Step 1</b>	The Department Chair/Division Manager appoints the Project Leader.
<b>Step 2</b>	The Project Leader consults with the Department/Division <a href="#">ES&amp;H Coordinator</a> and the <a href="#">Safety &amp; Health Services Division (SHSD) Review Coordinator</a> to evaluate the scope of Facility/Change for new and existing facilities.
<b>Step 3</b>	<p>If one or more of the following criteria are met, the Project Leader will determine if an Operational Readiness Evaluation is required for the new or existing facilities.</p> <ul style="list-style-type: none"> <li>For a new facility where               <ul style="list-style-type: none"> <li>the total value is greater than \$100,000;</li> <li>the floor space is greater than 2,000 square feet;</li> <li>the installation of services (such as electrical, water, gases, sewer, fire protection, or detection) is required; or</li> <li>the introduction of any feature/process may have significant impacts on environment, safety, or health.</li> </ul> </li> <li>For an existing facility where               <ul style="list-style-type: none"> <li>the work involves relocating, modifying, or installing services;</li> </ul> </li> </ul>

- the work involves relocating, modifying, or installing services;
- the floor plan is modified;
- there is a change in design or use; or
- the modifications are outside the scope of [Facility Use Agreements](#) (\*Limited Access).

**Note:** If none of the above criteria are met, a new or existing facility is exempt from an Operational Readiness Evaluation. Departments/Divisions should use this process for a new or existing facility even if they fall below the thresholds outlined above.

**Note:** The rationale to perform an ORE or not must be documented by the Department/Division.

## References

[Facility Use Agreements](#) home page (\*Limited Access)

[Work Planning and Control for Experiments and Operations](#) Subject Area.

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## 2. Chartering an Operational Readiness Evaluation (ORE)

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

### Applicability

This information applies to the Project Leader, [Safety & Health Services Division \(SHSD\) Review Coordinator](#), and Department Chair/Division Manager who charters an Operational Readiness Evaluation (ORE) for a new or existing facility.

### Required Procedure

<b>Step 1</b>	<p>The Project Leader either generates or modifies a Facility Use Agreement (FUA). For more information on developing an FUA, see the <a href="#">Facility Use Agreements</a> subject area.</p> <p><b>Note:</b> The Project Leader contacts either the appropriate Organization Manager for a new FUA or the Building Manager for modifications to an existing FUA.</p>
<b>Step 2</b>	<p>The Project Leader, in conjunction with the <a href="#">Safety &amp; Health Services Division (SHSD) Review Coordinator</a>, determines the number and types of modules (either an incremental module or a beneficial occupancy).</p> <p><b>Note:</b> An incremental module can be used to subdivide complex projects into various stages (i.e., increments) to facilitate operational readiness.</p> <p><b>Note:</b> A Beneficial Occupancy Readiness Evaluation (BORE) is used when a partial occupancy of a facility is required to conduct incremental start-up of a facility or process, to conduct performance or safety testing of facility equipment, or to install process equipment. For a beneficial occupancy, safety is the primary consideration and the facility is required to have certain items in place (such as fire extinguishers, exit signs or doors). See section <a href="#">Beneficial Occupancy Readiness Evaluation (BORE)</a> which contains detailed instructions on how to charter, conduct, and obtain approval for a Beneficial Occupancy.</p>

<b>Step 4</b>	The Project Leader requests the Department Chair/Division Manager to commission an Operational Readiness Evaluation (ORE).
<b>Step 5</b>	<p>The Department Chair/Division Manager, in consultation with the SHSD Review Coordinator, as appropriate, identifies an ORE Committee and designates an ORE Chair. The Department Chair/Division Manager sends out an <a href="#">Operational Readiness Evaluation (ORE) Appointment Memo</a>.</p> <p><b>Note:</b> The ORE Committee typically consists of appropriate Subject Matter Experts from the ESH&amp;Q Directorate, Plant Engineering, and other organizational personnel.</p> <p><b>Note:</b> The Department of Energy (DOE) Brookhaven Site Office (BHSO) Facility Representative is notified on the <a href="#">Operational Readiness Evaluation (ORE) Appointment Memo</a> of the ORE.</p>

## References

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### 3. Conducting an Operational Readiness Evaluation (ORE)

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

#### Applicability

This information applies to the Project Leader, Operational Readiness Evaluation (ORE) Chair, and ORE Committee members who conduct an Operational Readiness Evaluation.

#### Required Procedure

<b>Step 1</b>	<p>The Operational Readiness Evaluation (ORE) Chair asks the Project Leader to supply all relevant documentation to conduct the review. This <i>could</i> include the following:</p> <ul style="list-style-type: none"> <li>✦ Safety Analysis Report (SAR),</li> <li>✦ Safety Assessment Document (SAD; for more information on developing a SAD, see <a href="#">Section 2. Developing the Safety Assessment Document (SAD)</a> in the <a href="#">Accelerator Safety</a> subject area),</li> <li>✦ Failure Modes and Effects Analysis (FMEA),</li> <li>✦ Hazard Categorization (for more information, see the <a href="#">Facility Hazard Categorization</a> subject area),</li> <li>✦ Standard Operating Procedures (SOPs),</li> <li>✦ Training Plans,</li> <li>✦ existing <a href="#">Facility Use Agreement</a> (*Limited Access), or</li> <li>✦ new Facility Use Agreement (FUA; for detailed information on developing an FUA, see the <a href="#">Facility Use Agreements</a> subject area).</li> </ul>
<b>Step 2</b>	<p>The ORE Chair convenes the ORE Committee to provide the following for committee members:</p> <ul style="list-style-type: none"> <li>✦ an overview and scope of the review,</li> <li>✦ methodologies for conducting and documenting the review, and</li> <li>✦ information regarding training/qualifications or personnel protective equipment (PPE).</li> </ul>
<b>Step 3</b>	<p>The following are reviewed during an ORE (see the exhibit <a href="#">Operational Readiness Evaluation (ORE) Checklist</a>):</p>

	<ul style="list-style-type: none"> <li>≧ structure, services, hardware, tools, and emergency systems;</li> <li>≧ procedures for operations and maintenance;</li> <li>≧ management systems, such as the <a href="#">Environmental Management System Management System Description</a>, <a href="#">Integrated Safety Management System Program Description</a> at the departmental level, and compliance with <a href="#">Standards-Based Management System Management System Description</a>; and</li> <li>≧ personnel training and qualifications.</li> </ul> <p><b>Note:</b> The ORE Chair assigns committee member responsibility for areas of review and distributes relevant documentation.</p>
<b>Step 4</b>	<p>The Project Leader provides an overview of the Facility/Change to the ORE Committee.</p> <p><b>Note:</b> If possible, the Project Leader should try to coordinate a visit to the site of the evaluation.</p>
<b>Step 5</b>	<p>The ORE Chair, in conjunction with the Project Leader, ensures that committee members have the appropriate training/qualifications or personal protective equipment to enter the evaluation area.</p>
<b>Step 6</b>	<p>The ORE Committee meets at a designated location and conducts the ORE using the <a href="#">Operational Readiness Evaluation (ORE) Checklist</a> for the area(s) that have been assigned.</p>
<b>Step 7</b>	<p>The ORE Chair asks each committee member for feedback after the inspection. All findings are designated as either pre-start or post-start. The Chair compiles a draft report (see the <a href="#">Operational Readiness Evaluation (ORE) Report Template</a>). The committee members review and comment on the draft report.</p>
<b>Step 8</b>	<p>The ORE Chair compiles and resolves all comments on the final report. The final report is signed by all ORE Committee members.</p> <p><b>Note:</b> The final report is sent to the Project Leader, with a copy to the Department Chair/Division Manager.</p>

## References

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## 4. Obtaining Approval for Operational Readiness

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

### Applicability

This information applies to the Project Leader, Plant Engineering Division Manager or designee, and Department Chair/Division Manager for the process of obtaining approval for Operational Readiness.

### Required Procedure

<b>Step 1</b>	The Project Leader reviews the Operational Readiness Evaluation (ORE) final report, compiles a list of required modifications to the facility that are then tracked in the Department/Division internal system, and assigns responsibility for corrective action.
<b>Step 2</b>	<p>The Plant Engineering Division Manager or designee issues a Transfer for Maintenance Accountability (TFMA) memo to the Department/Division, with a copy to the Project Leader.</p> <p><b>Note:</b> The TFMA memo contains a list of items (such as exhaust fans, fire alarm systems, lamp fixtures, etc.) that Plant Engineering will assume responsibility for maintaining.</p>
<b>Step 3</b>	<p>The Project Leader closes remaining pre-start findings and assembles a documentation package which includes the ORE report (from the <a href="#">Operational Readiness Evaluation (ORE) Approval Document Template</a>) and the TFMA memo.</p> <p>If the facility impact is a minor revision to the <a href="#">Facility Use Agreement</a> or no revision is required, then the Project Leader forwards the documentation package to the Department Chair/Division Manager using the <a href="#">Operational Readiness Evaluation (ORE) Approval Document Template</a>. Minor revisions to an FUA consist of simple grammatical changes, staff personnel responsibility changes, and obvious error corrections.</p> <p>If the facility impact is a major revision to the FUA (i.e., change to the operational safety envelope) or requires that a new FUA be developed, then the Project</p>

	Leader and Department/Division Manager perform a change process (i.e., submit an <a href="#">FUA Change Analysis Basis Document</a> with the ORE documentation package). For more information, see Step 3. from <a href="#">Section 2. Introduction of New Activities, Change Control, and Administration</a> in the <a href="#">Facility Use Agreements</a> subject area.
<b>Step 4</b>	<p>The Department Chair/Division Manager reviews the request for Operational Readiness, or the results of the FUA process, and approves occupancy/operation by completing the <a href="#">Operational Readiness Evaluation (ORE) Approval Document Template</a>.</p> <p><b>Note:</b> Findings from the FUA analysis (in Step 3 above) are to be communicated to the Deputy Director of Operations along with the Operational Readiness Evaluation (ORE) Approval Document.</p> <p><b>Note:</b> The completed ORE approval document is retained by the Department/Division.</p>
<b>Step 5</b>	The Department Chair/Division Manager follows up on post-start findings. Responsibility for closeout of all findings are assigned and tracked to closure in accordance with organizational corrective action management processes.

## References


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Subject Area: **Operational Readiness Evaluation (ORE)**

## 5. Beneficial Occupancy Readiness Evaluation (BORE)

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

### Applicability

This information applies to all managers and staff planning to have limited use or occupancy of a facility before operational readiness.

### Required Procedure

The requester may require occupancy of a facility before a full Operational Readiness Evaluation (ORE) to conduct incremental start-up of a facility or process, to conduct performance testing of facility equipment and/or safety testing of facility equipment, or to install process equipment. A Beneficial Occupancy Readiness Evaluation (BORE) could be classified in some circumstances as an incremental module of an ORE, because it is one completed stage towards the use of a facility (although limited use). There may even be several BOREs for start-up of various systems.

To obtain occupancy, a BORE is required to ensure that the workspace meets the requirements for environment, safety, and health before use. The steps for chartering and conducting a BORE are similar to those for an ORE, with some minor differences (e.g., a BORE Committee may require fewer members for an evaluation). The requirements for obtaining beneficial occupancy are less stringent than those for operational readiness. As such, administrative controls or other means may be used to set restrictions for an incomplete facility.

**Before full operation of a facility, the department is required to request an ORE.**

<b>Step 1</b>	The Project Leader asks the Department Chair/Division Manager to commission a Beneficial Occupancy Readiness Evaluation (BORE).
<b>Step 2</b>	The Department Chair/Division Manager, in consultation with the <a href="#">Safety &amp; Health Services Division (SHSD) Review Coordinator</a> , as appropriate, identifies

	<p>a BORE Committee and designates a BORE Chair. The Department Chair/Division Manager sends out a <a href="#">Beneficial Occupancy Readiness Evaluation (BORE) Appointment Memo</a> to the Committee.</p> <p><b>Note:</b> The BORE Committee typically consists of appropriate Subject Matter Experts from the ESH&amp;Q directorate, Plant Engineering, and other organizational personnel.</p> <p><b>Note:</b> The Department of Energy (DOE) Brookhaven Site Office (BHSO) Facility Representative is notified on the <a href="#">Beneficial Occupancy Readiness Evaluation (BORE) Appointment Memo</a> of the ORE.</p>
<b>Step 3</b>	<p>The BORE Chair asks the Project Leader to supply all relevant documentation to conduct the review. This <i>could</i> include the following:</p> <ul style="list-style-type: none"> <li>• Safety Analysis Report (SAR),</li> <li>• Safety Assessment Document (SAD) - (for more information, see the <a href="#">Accelerator Safety</a> subject area),</li> <li>• Failure Modes and Effects Analysis (FMEA),</li> <li>• Hazard Categorization (for more information, see the <a href="#">Facility Hazard Categorization</a> subject area),</li> <li>• Standard Operating Procedures (SOPs),</li> <li>• Training Plans,</li> <li>• existing <a href="#">Facility Use Agreement</a> (*Limited Access), or</li> <li>• new Facility Use Agreement (FUA). For detailed information on developing an FUA, see the <a href="#">Facility Use Agreements</a> subject area.</li> </ul>
<b>Step 4</b>	<p>The BORE Chair convenes the BORE Committee to provide the following for committee members:</p> <ul style="list-style-type: none"> <li>• an overview and scope of the review,</li> <li>• methodologies for conducting and documenting the review, and</li> <li>• information regarding training/qualifications or personnel protective equipment (PPE).</li> </ul> <p>The following are reviewed during a BORE:</p> <ul style="list-style-type: none"> <li>• structure, services, hardware, tools, and emergency systems;</li> <li>• procedures for operations and maintenance;</li> <li>• management systems, such as the <a href="#">Environmental Management System Management System Description</a>, <a href="#">Integrated Safety Management System Program Description</a> at the departmental level, and compliance with <a href="#">Standards-Based Management System Management System Description</a>; and</li> <li>• personnel training and qualifications.</li> </ul> <p><b>Note:</b> The BORE Chair assigns committee member responsibility for areas of review and distributes relevant documentation.</p>
<b>Step 5</b>	<p>The Project Leader provides an overview of the Facility/Change to the BORE Committee.</p>



	<p><b>Note:</b> If possible, the Project Leader should try to coordinate a visit to the site of the evaluation.</p>
<b>Step 6</b>	The BORE Chair, in conjunction with the Project Leader, ensures that committee members have the appropriate training/qualifications or personal protective equipment to enter the evaluation area.
<b>Step 7</b>	The BORE Committee meets at a designated location and conducts the BORE for the area(s) that have been assigned.
<b>Step 8</b>	The BORE Chair asks each committee member for feedback after the inspection. All findings are designated as either pre-occupancy or post-occupancy. The Chair compiles a draft report (see the <a href="#">Beneficial Occupancy Readiness Evaluation (BORE) Report Template</a> ). The committee members review and comment on the draft report.
<b>Step 9</b>	<p>The BORE Chair compiles and resolves all comments on the final report. The final report is signed by all BORE Committee members.</p> <p><b>Note:</b> The final report is sent to the Project Leader with a copy to the Department Chair/Division Manager.</p>
<b>Step 10</b>	The Project Leader reviews the <a href="#">Beneficial Occupancy Readiness Evaluation (BORE) Report</a> , compiles a list of modifications to the facility that are then tracked in the Department/Division internal system, and assigns responsibility for corrective action.
<b>Step 11</b>	<p>As applicable, the Plant Engineering Division Manager or designee issues a Transfer for Maintenance Accountability (TFMA) memo to the Department/Division, with a copy to the Project Leader.</p> <p><b>Note:</b> The TFMA memo contains a list of items that Plant Engineering will be responsible for maintaining.</p>
<b>Step 12</b>	The Project Leader closes remaining pre-occupancy findings and assembles a documentation package which includes the BORE report (from the <a href="#">Beneficial Occupancy Readiness Evaluation (BORE) Approval Document Template</a> ) and the TFMA memo.
<b>Step 13</b>	<p>The Department Chair/Division Manager reviews the Request for Beneficial Occupancy, or the results of the FUA process, and approves occupancy by completing the <a href="#">Beneficial Occupancy Readiness Evaluation (BORE) Approval Document Template</a>.</p> <p><b>Note:</b> The completed BORE approval document is retained by the Department/Division.</p>
<b>Step 14</b>	The Department Chair/Division Manager follows up on post-occupancy findings. Responsibility for closeout of all findings are assigned and tracked to closure in accordance with organizational corrective action management processes.

## References



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## Definitions: Operational Readiness Evaluation (ORE)

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

Term	Definition
beneficial occupancy	Partial occupancy of an incomplete facility before operational readiness, where administrative controls or other means may be used to limit hazards of an incomplete facility.
facility	A building, installation, or location, which houses people, an experimental apparatus, or process. A facility may consist of a single building, a group of buildings, an experimental installation, or a portable equipment system, such as a diagnostic trailer or assembly tower.
Failure Modes and Effects Analysis (FMEA)	A procedure by which each potential failure mode in a system is analyzed to determine the results or effects thereof on the system, and to classify each potential failure mode according to its severity.
incremental module	Used to subdivide complex Operational Readiness Evaluations into various stages.
operational readiness	That state of a facility for operations that meets the requirements of the plant's facilities, hardware, tools, personnel, and procedures, and also is in compliance with BNL and DOE regulations and procedures.
post-occupancy findings	A list of items compiled by the Beneficial Occupancy Readiness Evaluation Committee that does not need to be completed prior to occupancy; however they must be tracked by the department until completion.
pre-occupancy findings	A list of items compiled by the Beneficial Occupancy Readiness Evaluation Committee that must be completed prior to occupancy.
post-start findings	A list of items compiled by the Operational Readiness Evaluation Committee that does not need to be completed prior to the start of operations; however they must be tracked by the department until completion.
pre-start findings	A list of items compiled by the Operational Readiness Evaluation Committee that must be completed prior to the start of operations.
Operational Readiness Evaluation (ORE)	A structured method for verifying that hardware, personnel, and procedures associated with commissioning or routine operations are ready to permit the activity to be undertaken safely.

Operational Readiness Evaluation (ORE) report	The ORE report generated by the Operational Readiness Evaluation Committee and submitted to the Department/Division Manager.
Safety Assessment Document (SAD)	The document containing the results of a safety analysis for a facility pertinent to understanding the risks of the proposed undertaking.
Safety Analysis Report (SAR)	The document containing the results of a safety analysis for a facility pertinent to understanding the risks of the proposed undertaking.
Transfer of Maintenance Accountability (TFMA) memo	A memo that lists the items (such as fire alarm systems, exhaust fans, lamp fixtures, etc.) that are to be maintained at Plant Engineering's expense. This is determined after all the essential utilities and operating systems are operational and maintainable.

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## **OPERATIONAL READINESS EVALUATION (ORE) CHECKLIST**

**(Adapted from DOE-STD-1120-98/Vol. 2, Appendix J)**

This Operational Readiness Evaluation (ORE) checklist may be used as a starting point for developing a project-specific readiness checklist. The checklist is organized according to the following categories:

1. Safety Basis
2. Project Plans
3. Project Procedures Manuals
4. Work Package
5. Facility Preparation
6. Support Facilities
7. Support Equipment Preparation
8. Traffic Control
9. Industrial Safety and Hygiene
10. Radiation Protection
11. Environmental Protection
12. Emergency Preparedness
13. Worker Training, Testing, and Qualification
14. Subcontractors
15. Management of Change

**ORE CHECKLIST:**      **PROJECT:** \_\_\_\_\_      **PROJECT MGR:** \_\_\_\_\_  
 (Adapted from DOE-STD-1120-98/Vol. 2, Appendix J)

	ACTION ASSIGNEE	ACCEPTABLE?		
		YES	NO	N/A
<b>I. Safety Basis: Confirm that Hazard Baseline Documents are Appropriate, Complete, Reviewed, and Approved by Appropriate Parties</b>  1. Hazard characterization report 2. Hazard baseline document (e.g., SAR, BIO, or ASA) 3. NEPA process (e.g., EIS, EA, or categorical exclusion) 4. TSRs 5. Environmental permits (e.g., NPDES/SPDES, NESHAPS, or NAAQS)				
<b>II. Project Plans: Confirm that the Following Project Plans have been Developed, Reviewed, and Approved by Appropriate Parties and are in Place</b>  1. Project management plan (including project organization with responsibilities, budgets and schedules, project controls program, and reporting requirements) 2. Health and safety plan (including asbestos abatement) 3. Quality assurance plan (including records management and retention requirements) 4. Procurement plan 5. Waste management plan 6. Emergency plan (e.g., for fires, releases or injuries) 7. Final verification plan				
<b>III. Project Procedures Manuals: Confirm that the Following Procedures Manuals have been Developed, Reviewed, and Approved by Appropriate Parties</b>  1. Engineering procedures manual 2. Procurement procedures manual 3. ES&H procedures manual <ul style="list-style-type: none"> <li>a. Personnel exposure control procedures</li> <li>b. Sampling and monitoring procedures</li> <li>c. Instrument calibration procedures</li> <li>d. Hazardous substance control (including asbestos controls) procedures</li> </ul> 4. Emergency procedures manual <ul style="list-style-type: none"> <li>a. Evacuation, assembly, and personnel accounting procedures</li> <li>b. Medical emergency procedures</li> <li>c. Spill and release control procedures</li> <li>d. Decontamination procedures</li> </ul> 5. Material control manual (e.g., procured items) <ul style="list-style-type: none"> <li>a. Material inspection and inventory procedures</li> <li>b. Material packaging and transport procedures</li> <li>c. Material storage and retrieval procedures</li> </ul>				

**ORE CHECKLIST:**      **PROJECT:** \_\_\_\_\_      **PROJECT MGR:** \_\_\_\_\_  
 (Adapted from DOE-STD-1120-98/Vol. 2, Appendix J)

	ACTION ASSIGNEE	ACCEPTABLE?		
		YES	NO	N/A
<b>IV. Work Package: Confirm that the Following Documents have been Developed, Reviewed, and Approved by Appropriate Parties. Confirm Support Activities have been Completed and Documented</b>  1. Work instructions detailing sequence of work a. Supporting drawings and specifications b. Inspection hold points c. Data forms d. Task hazard analysis of each work step in instructions 2. Work permits a. Radiological work permits (with current radiological surveys) b. Hazardous work permits c. Confined space entry permits d. Cutting, burning, and welding permits e. Excavation and trenching permits f. Scaffolding permits g. Lifting and rigging permits h. Special equipment operating permits i. Electrical "Working Hot" permits 3. Material safety data sheets for all hazardous substances to be used				
<b>V. Facility Preparation: Confirm the Existence and Adequacy of Facility Support Features (Inspect)</b>  1. Facility Use Agreements (FUAs) 2. Space requirements a. Office space b. Restrooms c. Change rooms d. "Break" facilities e. Material laydown and storage space f. Packaged waste storage g. Flammable material storage h. Hazardous chemical storage I. Equipment maintenance and storage 3. Postings a. Warning signs per DOE and OSHA requirements (e.g., restricted area, radiological control area, or high voltage) b. Evacuation routes c. "No smoking" signs 4. Custodial service (e.g., cleaning and janitorial) 5. Support utilities a. HVAC test complete and results documented b. HEPA filter DOP test complete and results documented c. Installed lighting d. Noise control and abatement e. Physical barriers to separate project work from other operations f. Utility air g. Electrical power h. Potable water i. Fire water j. Sewer k. Disposal system for radioactive contaminated fluids 6. Systems and components to be removed are tagged or identified 7. Lock and tag requirements are completed and documented in accordance with approved procedures 8. Breathing air system a. Adequate volume b. Equipment tested c. Air certified				

**ORE CHECKLIST:**      **PROJECT:** \_\_\_\_\_      **PROJECT MGR:** \_\_\_\_\_  
 (Adapted from DOE-STD-1120-98/Vol. 2, Appendix J)

	ACTION ASSIGNEE	ACCEPTABLE?		
		YES	NO	N/A
<b>VI. Support Facilities</b>  1. Waste processing 2. Waste packaging 3. Decontamination (including equipment and personnel) 4. Medical				
<b>VII. Support Equipment Preparation: Verify the Readiness of Support Equipment (e.g., Inspections, Maintenance, and Testing Logs and Documentation Completed)</b>  1. Heavy equipment test, inspection, and certification a. Trucks b. Cranes c. Bulldozers d. Backhoes e. Forklifts f. Front-end loaders 2. Waste solidification systems 3. Volume-reduction equipment a. Shredders b. Compactors 4. Decontamination equipment a. High-pressure liquid b. Liquid abrasive c. Dry abrasive d. Scabbing, grinding, and chipping e. Chemical decontamination equipment or system 5. Hand and power tools inspect and test a. Proper guards b. Proper grounding 6. Lifting and rigging tested and certified a. Wire rope b. Slings (including rope) c. Come-alongs (including block and tackle assemblies) d. Shackles e. Hooks 7. Preventive maintenance program in place 8. Transfer For Maintenance Accountability (TFMA)				
<b>VIII. Traffic Control</b>  1. Loading, unloading, and staging zones designated and posted 2. Traffic flow patterns established and marked a. Equipment b. Personnel 3. Roadways, gates, doors, hallways, corridors, etc. evaluated for heavy or oversized equipment and material movement 4. Hazardous material transport routing established a. Onsite b. Offsite 5. Waste disposal routing established (offsite) a. Routing capable of supporting loads b. Local officials along the route are involved c. Permits obtained d. Transport routing, system upgrades, and modifications completed and approved 6. Onsite escort requirements available (e.g., security and radiation control) 7. Approved waste packages for radioactive or hazardous substances available a. Properly specified b. Proper and approved labeling				

**ORE CHECKLIST:**      **PROJECT:** \_\_\_\_\_      **PROJECT MGR:** \_\_\_\_\_  
 (Adapted from DOE-STD-1120-98/Vol. 2, Appendix J)

	ACTION ASSIGNEE	ACCEPTABLE?		
		YES	NO	N/A
<b>IX. Industrial Safety and Hygiene: Ensure the Availability of Adequate Quantities and Functional Adequacy of Worker Protective Equipment and Materials</b>  1. Personnel protective equipment (PPE) a. Hard hats or other head covering b. Safety glasses or goggles c. Gloves (specific to task) d. Safety shoes e. Hearing protection f. Special PPE for hazardous substance handling g. Respirators h. Heat stress protection (e.g., air suits and ice vests) i. Lifting supports j. Fall protection devices 2. First-aid kits 3. Herbicide and pesticide spray 4. Air monitors and samplers (with alarms) a. Explosive gas b. Hazardous chemicals c. Asbestos				
<b>X. Radiation Protection: Ensure Availability of Adequate Quantities and Functional Adequacy of Worker Protective Equipment and Materials</b>  1. Personnel protective equipment (PPE) a. Respirators b. Breathing air support 2. Portable radiation detectors 3. Decontamination supplies 4. Fixed or stationary monitoring equipment a. High-volume air samplers b. Constant air monitors (CAM) with alarms c. Area radiation monitors (ARM) d. Sample counting systems e. Personnel and equipment frisking stations f. Portal monitors 5. If fissionable material is present, criticality detection and alarm systems are in place, tested, and results documented 6. Contamination controls in place a. Containments b. Tents c. Barriers d. Step-off pads e. Laundry hampers f. Proper postings g. Fixatives 7. Temporary shielding in place				



**ORE CHECKLIST:**      **PROJECT:** \_\_\_\_\_      **PROJECT MGR:** \_\_\_\_\_  
 (Adapted from DOE-STD-1120-98/Vol. 2, Appendix J)

	ACTION ASSIGNEE	ACCEPTABLE?		
		YES	NO	N/A
<b>XI. Environmental Protection</b>  1. Environmental Management System (EMS) 2. Environmental surveillance program - required documents are in place with proper approvals 3. Effluent control (e.g., filtration and water treatment) a. All potential effluent discharges identified b. Control system(s) adequate for effluent contaminant control c. Control system installed and tested with results documented 4. Effluent monitoring a. All potential effluent discharge points identified b. Effluent monitors installed and tested with results documented c. Sample locations identified and sample systems installed and functionally verified				
<b>XII. Emergency Preparedness: Confirm the Availability and Functioning of the Emergency Preparedness System</b>  1. Communications a. Two-way radios b. Pagers c. Telephones d. Public address (PA) system e. Alarms (e.g., fire, radiation, chemical, and criticality) 2. Fire equipment - in place, functional, and properly labeled a. Sprinkler system b. Pull boxes c. Fire and smoke detectors d. Fire extinguishers e. Hydrants f. Stand pipes 3. Fire exits clearly marked and unobstructed 4. Unique fire suppression material (e.g., halon, sand, and foam) 5. Safety showers, eye wash, and decontamination facilities in place and functional 6. Emergency breathing air supply (e.g., SCBA) 7. Emergency supply cabinet fully equipped and readily accessible 8. Emergency lighting available and operable 9. Emergency power or UPS available and operable 10. Fire/Rescue Run Data updates				

**ORE CHECKLIST:**      **PROJECT:** \_\_\_\_\_      **PROJECT MGR:** \_\_\_\_\_  
 (Adapted from DOE-STD-1120-98/Vol. 2, Appendix J)

	ACTION ASSIGNEE	ACCEPTABLE?		
		YES	NO	N/A
<b>XIII. Worker Training, Testing, and Qualification:</b> <b>Verify that Each Worker Has Completed the Following, Been Successfully Tested When Required, and a Record is Available Verifying the Worker's Qualification</b>  1. Basic training completed - all workers a. HAZWOPER b. Radiological 2. Supervisor advanced training a. Radioactive waste supervisor b. HAZWOPER supervisor 3. Specialized worker training a. Heavy equipment operator b. Welder c. Health physics technician (including radiological controls) d. Special D&D equipment operator e. Radioactive waste operations f. Waste process equipment operator g. Plutonium handling 4. Site-specific hazards indoctrination 5. Emergency response drills conducted and documented 6. Medical examination (including fitness requirements) 7. Respirator and breathing air testing and qualification 8. Special PPE training and qualification 9. "Dry-run" or demonstration successfully conducted and documented for any new technology or equipment to be utilized 10. Mockup training is completed and documented 11. Work package indoctrination with the workers and walkdowns are completed 12. Other training as needed (e.g., fire watch, gas-free inspector, and rigger)				
<b>XIV. Subcontractors: Ensure that All Subcontractors are Mobilized as Required and All Pre-Job and Mobilization Requirements are Completed</b>  1. Pre-job deliverables are received and accepted by the project a. Health and safety programs and plans b. QA plan/program c. Worker certifications (e.g., training, medical, special equipment, operator, and resume) d. Equipment certifications e. Special operating procedures 2. Subcontractor resources a. All required subcontract personnel are onsite and have successfully completed site-specific qualification requirements b. All required subcontractor equipment is onsite and has been successfully tested c. All required support materials and consumables are staged onsite and available				
<b>XV. Management of Change: Ensure that a Change Control System is in Place and Workers are Familiar with the Requirements</b>  1. Pre-job meetings to discuss anticipated hazards and hazards controls conducted daily 2. Lessons learned from work completed 3. Response to unanticipated conditions of workplace				

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## Operational Readiness Evaluation (ORE) Flowchart

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

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The Operational Readiness Evaluation (ORE) Flowchart is provided as a [PDF](#) file for viewing and printing.

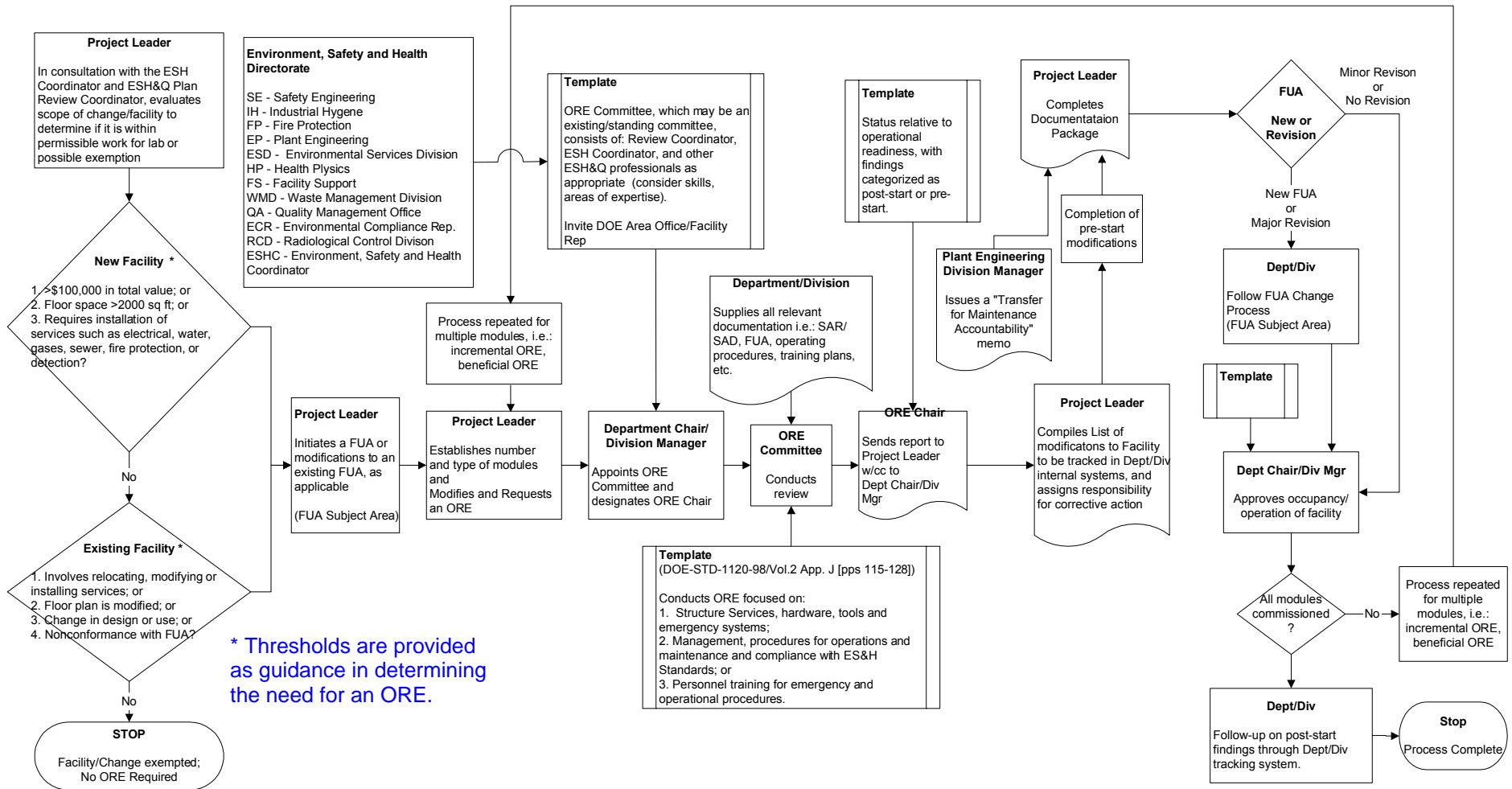
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## Operational Readiness Evaluation (ORE) Flowchart



\* Thresholds are provided as guidance in determining the need for an ORE.

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## Beneficial Operational Readiness Evaluation (BORE) Appointment Memo Template

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

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# Memo

*date:*

*to:* **(Project Leader)**

*from:* **(Organization Manager)**

*subject:* **Beneficial Occupancy Readiness Evaluation – (Identify Facility or Project)**

As requested by **(Organization)**, a Beneficial Occupancy Readiness Evaluation (BORE) of the **(Facility or Project)** located **(define area)** has been scheduled for **(date of review walkthrough)**. The BORE Committee will meet at **(designated meeting place)** for the start of this evaluation. Project/facility personnel will make a short presentation regarding the need for evaluation<sup>1</sup>. Members of the BORE Committee are<sup>2</sup>: **(Suggested membership of the BORE Committee is listed below)**. **(Format for membership should be listed below as Name, Functional Title, and Organization)**

(HP, Plan Review Coordinator as Chair)  
(Organization, ES&H Coordinator)  
(EP, Maintenance Management)  
(HP, Industrial Hygiene)  
(EM, Fire Protection)  
(RCD, Radiation Protection)  
(ES, Environmental Protection)  
(ES, Environmental Compliance)

This BORE will consist of evaluating the **(Facility)** located in **(location)** to determine if all environment, safety, and health requirements have been met. In addition, essential utilities will be reviewed to ensure that they are operational and maintainable. Findings from this BORE will be communicated to the **(Organizational Manager)** for follow-up. Wherever appropriate, the Facility Use Agreement (FUA) should be revised (for new facilities generated) to reflect these changes.

Cc: Organization Manager  
Safety & Health Services Division (SHSD) Manager  
BORE Committee members  
Department of Energy (DOE) Brookhaven Site Office (BHSO) Facility Representative

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<sup>1</sup> Pre-BORE briefing is recommended to define scope of the evaluation and description of facility operations for complex systems and/or new facilities.

<sup>2</sup> Assistance in determining the need of a BORE and the committee membership is available through the Safety and Health Services Division (SHSD) Review Coordinator.

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## Beneficial Occupancy Readiness Evaluation (BORE) Approval Document Template

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

The Beneficial Occupancy Readiness Evaluation (BORE) Approval Document Template is provided as a [Word](#) file for viewing and printing.

After completion, a copy of the Beneficial Operational Readiness Evaluation (BORE) Approval Document and attachments must be forwarded to the Deputy Director for Operations.

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## Beneficial Occupancy Readiness Evaluation (BORE) Approval Document Template

Facility/System:	
Location: (Drawing Number/Building Number):	
Responsible Department/Division:	
Date of evaluation:	
Scope of approved operations:	

	Y	N
Pre-occupancy findings complete (all pre-occupancy findings must be completed prior to approval)	<input type="checkbox"/>	<input type="checkbox"/>
Post-occupancy findings being tracked in Department/Division system	<input type="checkbox"/>	<input type="checkbox"/>
Transfer for Maintenance Accountability (TFMA) in place	<input type="checkbox"/>	<input type="checkbox"/>
Facility Use Agreement (FUA) changes necessary (If Y attach FUA Change Analysis Basis Document)	<input type="checkbox"/>	<input type="checkbox"/>
Change to facility hazard categorization (if Y notify Lab Nuclear Safety Officer)	<input type="checkbox"/>	<input type="checkbox"/>

### Signatures:

Project Leader: \_\_\_\_\_

Department Chair/Division Manager: \_\_\_\_\_


cc: Deputy Director for Operations

### Attachments:

- Beneficial Occupancy Readiness Evaluation (BORE) Report
- FUA Change Analysis Basis Document (if required)
- TFMA memo

*\* Retain in Department/Division file*





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## Beneficial Occupancy Readiness Evaluation (BORE) Report Template

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

The Beneficial Occupancy Readiness Evaluation (BORE) Report Template is provided as a [Word](#) file for viewing and printing.

A BORE report should be prepared as soon as possible after the completion of the evaluation. The BORE Chair should obtain input from all BORE Committee members and reach consensus on the readiness of the facility to commence the activity for which the BORE was performed.

The conclusions reached by each BORE committee member are the principal end product of the BORE. They should be carefully drawn so that they unambiguously reflect the true intent of the committee member, and they should be supported just as carefully. Suggestions of the types of information that will help support the conclusions include methodology used in pursuing the review, personnel contacted and their positions, documents reviewed, operations witnessed, and spaces visited.

A conclusion drawn as a result of the BORE effort may lead to one or more findings and/or observations. Findings are more serious and require documented closure. Findings reported by the team should be categorized as pre-occupancy or post-occupancy findings. A pre-occupancy finding is one, which, in the BORE Committee's opinion, must be corrected before an activity can be started. A post-occupancy finding can be corrected after the start of the activity under review.

### Acceptance Criteria

The BORE Committee should decide on the minimum acceptance criteria for each of the topics to be evaluated. A methodology for determining acceptance criteria for findings that could be used is as follows:

Pre-occupancy acceptance criteria screening:

- Does the issue involve equipment of a system having safety importance?  
Does this issue impact non-safety processes, functions, or components?

- Does this issue impact non-safety processes, functions, or components, which could adversely impact processes, functions, or components having safety importance?
- Does this issue involve potential adverse environmental impact exceeding regulatory or site specific release limits?
- Is this issue non-compliant with Brookhaven Science Associates (BSA) or DOE Brookhaven Site Office (BHSO)-approved start-up directives?
- Does this issue indicate a lack of adequate procedures or administrative systems having safety importance?
- Does this issue indicate operational or administrative noncompliance with procedures or policy having safety importance?
- Has this issue occurred with a frequency that indicates past corrective actions have been lacking or ineffective?
- Does the issue involve a previously unknown risk to worker public safety and health or previously unknown threat of environmental insult or release?
- Does the loss of operability of the item prevent safe shutdown, or cause the loss of essential monitoring?
- Does the finding indicate a lack of control, which can have near-term impact on the operability or functionality of equipment or subsystems having safety importance?
- Does the finding involve a violation or potential violation of worker safety or environmental protection regulatory requirements, which pose a significant danger to workers, the public or of environmental insult or release?

If the response to any of the above was yes, the item is considered a pre-occupancy issue. If the response to all of the above is no, the issue may be resolved after occupancy.

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# Memo

*date:*

*to:* (Project Leader)

*from:* (Operational Readiness Evaluation (ORE) Chair)

*subject:* Beneficial Occupancy Readiness Evaluation (BORE) – (Project or Facility)

As requested by the (**Organization**), a Beneficial Occupancy Readiness Evaluation (BORE) for the subject project/facility was performed on (*date*). The BORE Committee consisted of (*name BORE Committee members*). Also in attendance for the evaluation were (*name others participating in walkthrough*). The purpose of this evaluation was to verify that all environment, safety, and health requirements associated with occupancy have been met.

The attached table lists findings to be addressed. The findings from this evaluation have been categorized as either pre-occupancy or post-occupancy findings. The pre-occupancy findings shall be corrected or resolved by other mitigating action prior to receiving approval to operate. The post-occupancy findings should be corrected in a timely manner. Where appropriate, an action plan should be developed to assist in resolution of the finding. The (**Organization**) shall track all findings until completion.

## Attachment

Cc: BORE Committee members  
Attendees  
Organization Manager  
Safety & Health Services Division (SHSD) Manager  
Appropriate Assistant Laboratory Directors (ALDs)  
Department Chair/Division Manager  
Department of Energy (DOE) Brookhaven Site Office (BHSO) Facility Representative

## BENEFICIAL OCCUPANCY READINESS EVALUATION

**(PROJECT OR FACILITY)**

**(Date of evaluation)**

The following pre-occupancy findings need to be corrected or resolved by the responsible party in a timely manner. All findings are tracked by the (*Organization*) until completion.

No.	Pre-Occupancy Findings	Responsible Party
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

The following post-occupancy findings need to be corrected or resolved by the responsible party in a timely manner. All findings are tracked by the (*Organization*) until completion.

No.	Post-Occupancy Findings	Responsible Party
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

**COMMITTEE CONCURRENCE**

***(PROJECT NAME OR FACILITY)***

***(Date)***

**Name**

**Date**

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

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Subject Area: **Operational Readiness Evaluation (ORE)**

## Operational Readiness Evaluation (ORE) Appointment Memo Template

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

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# Memo

*date:*

*to:*                **(Project Leader)**

*from:*            **(Organization Manager)**

*subject:*        **Operational Readiness Evaluation – (Identify Facility or Project)**

As requested by **(Organization)**, an Operational Readiness Evaluation (ORE) of the **(Facility or Project)** located **(define area)** has been scheduled for **(date of review walkthrough)**. The ORE Committee will meet at **(designated meeting place)** for the start of this evaluation. Project/facility personnel will make a short presentation regarding the need for evaluation<sup>1</sup>. Members of the ORE Committee are<sup>2</sup>: **(Suggested membership of the ORE Committee is listed below)**. **(Format for membership should be listed below as Name, Functional Title, and Organization)**

(HP, Plan Review Coordinator as Chair)  
(Organization, ES&H Coordinator)  
(EP, Maintenance Management)  
(HP, Industrial Hygiene)  
(EM, Fire Protection)  
(RCD, Radiation Protection)  
(ES, Environmental Protection)  
(ES, Environmental Compliance)

This ORE will consist of evaluating the **(Facility)** located in **(location)** to determine if all environment, safety, and health requirements have been met to allow for the start-up, testing, commissioning, and/or operation. In addition, essential utilities will be reviewed to ensure that they are operational and maintainable. Findings from this ORE will be communicated to the **(Organizational Manager and Assistant Laboratory Director)** for follow-up. Wherever appropriate, the Facility Use Agreement (FUA) should be revised (for new facilities generated) to reflect these changes.

Cc:    Organization Manager  
      Safety & Health Services Division (SHSD) Manager  
      ORE Committee members  
      Department of Energy (DOE) Brookhaven Site Office (BHSO) Facility Representative

---

<sup>1</sup> Pre-ORE briefing is recommended to define scope of the evaluation and description of facility operations for complex systems and/or new facilities.

<sup>2</sup> Assistance in determining the need of an ORE and the committee membership is available through the Safety and Health Services Division (SHSD) Review Coordinator.



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Subject Area: **Operational Readiness Evaluation (ORE)**

## Operational Readiness Evaluation (ORE) Approval Document Template

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

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## Operational Readiness Evaluation (ORE) Approval Document Template

Facility/System:	
Location: (Drawing Number/Building Number):	
Responsible Department/Division:	
Date of evaluation:	
Scope of approved operations:	

	Y	N
Type of evaluation: Incremental	<input type="checkbox"/>	<input type="checkbox"/>
Type of evaluation: Final	<input type="checkbox"/>	<input type="checkbox"/>
Pre-start findings complete (all pre-start findings must be completed prior to approval)	<input type="checkbox"/>	<input type="checkbox"/>
Post-start findings being tracked in Department/Division system	<input type="checkbox"/>	<input type="checkbox"/>
Transfer for Maintenance Accountability (TFMA) in place	<input type="checkbox"/>	<input type="checkbox"/>
Facility Use Agreement (FUA) changes necessary (If Y attach FUA Change Analysis Basis Document)	<input type="checkbox"/>	<input type="checkbox"/>
Change to facility hazard categorization (if Y notify Lab Nuclear Safety Officer)	<input type="checkbox"/>	<input type="checkbox"/>

### Signatures:

Project Leader: \_\_\_\_\_


Department Chair/Division Manager: \_\_\_\_\_

cc: Deputy Director for Operations

### Attachments:

- Operational Readiness Evaluation (ORE) Report
- FUA Change Analysis Basis Document (if required)
- TFMA memo

*\* Retain in Department/Division file*



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Subject Area: **Operational Readiness Evaluation (ORE)**

# Operational Readiness Evaluation (ORE) Report Template

Effective Date: **September 2000**

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

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The Operational Readiness Evaluation (ORE) Report Template is provided as a [Word](#) file for viewing and printing.

An Operational Readiness Evaluation (ORE) report should be prepared as soon as possible after the completion of the evaluation. The ORE Chair should obtain input from all ORE Committee members, and the team should reach consensus on the readiness of the facility to commence the activity for which the ORE was performed.

The conclusions reached by each committee member are the principal end product of the ORE. They should be carefully drawn so that they unambiguously reflect the true intent of the committee member, and they should be supported just as carefully. Suggestions of the types of information that will help support the conclusions include methodology used in pursuing the review, personnel contacted and their positions, documents reviewed, operations witnessed, and spaces visited.

A conclusion drawn as a result of the ORE effort may lead to one or more findings and/or observations. Findings are more serious and require documented closure. Findings reported by the team should be categorized as pre-start or post-start findings. A pre-start finding is one, which, in the ORE Committee's opinion, must be corrected before an activity can be started. A post-start finding can be corrected after the start of the activity under review.

## Acceptance Criteria

The ORE Committee should decide on the minimum acceptance criteria for each of the topics to be evaluated. A methodology for determining acceptance criteria for findings that could be used is as follows:

Pre-start acceptance criteria screening:

- Does the issue involve equipment of a system having safety importance?
- Does this issue impact non-safety processes, functions, or components, which could adversely impact processes, functions, or components having

which could adversely impact processes, functions, or components having safety importance?

- Does this issue involve potential adverse environmental impact exceeding regulatory or site specific release limits?
- Is this issue non-compliant with Brookhaven Science Associates (BSA) or DOE Brookhaven Site Office (BHSO)-approved start-up directives?
- Does this issue indicate a lack of adequate procedures or administrative systems having safety importance?
- Does this issue indicate operational or administrative noncompliance with procedures or policy having safety importance?
- Has this issue occurred with a frequency that indicates past corrective actions have been lacking or ineffective?
- Does this issue require operator training having safety importance not specified in existing facility training requirements?
- Does the issue involve a previously unknown risk to worker public safety and health or previously unknown threat of environmental insult or release?
- Does the loss of operability of the item prevent safe shutdown, or cause the loss of essential monitoring?
- Does the finding indicate a lack of control, which can have near-term impact on the operability or functionality of equipment or subsystems having safety importance?
- Does the finding involve a violation or potential violation of worker safety or environmental protection regulatory requirements, which pose a significant danger to workers, the public or of environmental insult or release?

If the response to any of the above was yes, the item is considered a pre-start issue. If the response to all of the above is no, the issue may be resolved post-start.

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# Memo

*date:*

*to:* (Project Leader)

*from:* (Operational Readiness Evaluation (ORE) Chair)

*subject:* Operational Readiness Evaluation (ORE) – (Project or Facility)

As requested by the (**Organization**), an Operational Readiness Evaluation (ORE) for the subject project/facility was performed on (**date**). The ORE Committee consisted of (**name ORE Committee members**). Also in attendance for the evaluation were (**name others participating in walkthrough**). The purpose of this evaluation was to verify that all environment, safety, and health requirements associated with operation have been met.

The attached table lists findings that need to be addressed. The findings from this evaluation have been categorized as either pre-start or post-start findings. The pre-start findings shall be corrected or resolved by other mitigating action prior to receiving approval to operate. The post-start findings should be corrected in a timely manner. Where appropriate, an action plan should be developed to assist in resolution of the finding. The (**Organization**) shall track all findings until completion.

## Attachment

Cc: ORE Committee members  
Attendees  
Organization Manager  
Safety & Health Services (SHSD) Manager  
Appropriate Assistant Laboratory Directors (ALDs)  
Department Chair/Division Manager  
Department of Energy (DOE) Brookhaven Site Office (BHSO) Facility Representative

## OPERATIONAL READINESS EVALUATION

*(PROJECT OR FACILITY)*

*(Date of evaluation)*

The following Pre-Start Findings need to be corrected or resolved by the responsible party in a timely manner. All findings are tracked by the *(Organization)* until completion.

No.	Pre-Start Findings	Responsible Party
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

The following Post-Start Findings need to be corrected or resolved by the responsible party in a timely manner. All findings are tracked by the (*Organization*) until completion.

No.	Post-Start Findings	Responsible Party
1.		
2.		
3.		
4.		
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20.		

**COMMITTEE CONCURRENCE**

***(PROJECT NAME OR FACILITY)***

***(Date)***

**Name**

**Date**

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_


\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_

\_\_\_\_\_  
***(name of committee member)***

\_\_\_\_\_





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## Revision History: Operational Readiness Evaluation (ORE)

Point of Contact: [Safety & Health Services Division \(SHSD\) Review Coordinator](#)

### Revision History of this Subject Area

Date	Description	Management System
June 2004 -- Minor Rev. 1.2	"Brookhaven Area Office (BAO)" and "Brookhaven Group Office (BHG)" are replaced with "Brookhaven Site Office (BHSO)."	Facility Safety
September 2000	This subject area was developed to describe the procedures to determine, charter, conduct, and obtain an Operational Readiness Evaluation (ORE). It is a new subject area that was developed using the process for Standards-Based Management development.	Facility Safety

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